Assignment 2

Administration, Supervision, and Training (cont)

Textbook Assignment: Engineman 1&C, NAVEDTRA 10543-E1, Pages 2-12 through 2-39

Learning Objective: Recognize the purpose and the importance of Trend and Spectrographic Analyses.

● Question 2-1 is to be judged True or False.

2-1. Trend and spectrographic analyses are used to spot impending engine malfunctions.

2-2. Which of the following is a means used to determine if an engine needs to be overhauled?

1. The current operating data is compared with the previous operating data
2. The operating data of the engine is compared with that of another engine of the same type
3. The temperature of the lube oil entering the oil cooler is compared to that of the one leaving the cooler
4. The last two operating data sheets are compared

2-3. How are engine performance data used as a tool?

1. They are used to circle the readings that are out of limits
2. They are used to make graphs
3. They are used to bring the out of limit readings to the attention of the engineer officer
4. They are used to discuss the operating data with all operators

2-4. In order to produce meaningful graphs for a generator, what load percentage should the data indicate?

1. 25%
2. 50%
3. 80%
4. 100%

● Questions 2-5 and 2-6 are to be judged True or False.

2-5. In most cases, a set of readings should be plotted every 200 hours of engine operation.

2-6. Engine performance data should be obtained within 5 minutes after start up.

2-7. When preparing a graph, at what operating hour do you place your first point for lube oil consumption?

1. 100
2. 200
3. 300
4. 400

2-8. Which of the following information can be obtained from the curves on graphs?

1. The condition of the engine
2. What needs to be done to the engine
3. The life expectancy of vital parts
4. All of the above.

2-9. What can you determine from a spectrometric analysis of engine oil?

1. The extent of accelerated wear of an internal combustion engine
2. The amount of oil the engine uses per month
3. The rate of flow of the cooling water to the lube oil cooler
4. The amount of oil pressure produced by the lube oil pump

● Questions 2-10 and 2-11 are to be judged True or False.

2-10. After major overhaul, ships should, maintain accurate records of operating hours, including oil changes, and samplings in order to provide the testing facility with the information indicated in the sampling kit.

2-11. After an oil sample is received at a shipyard or an IMA, a physical test and a spectrometric analysis are performed.

Learning Objective: Point out some administrative and supervisory responsibilities in relation to subordinate personnel, the procurement of repair parts and materials, scheduling jobs, and estimating time and materials for a job.

2-12. In addition to the supply officer, who is responsible for taking the initiative in maintaining an adequate supply of engineering spare parts?

1. Engineer officer
2. Main propulsion assistant
3. Prime users of the parts
4. Senior supply petty officer

2-13. Aboard ship, which of the following is NOT one of your responsibilities in connection with maintenance and repair?

1. To select materials on the basis of service conditions they must withstand
2. Issue and account for material required for the support of the ship
3. Identify repair parts from machinery that is familiar to you
4. Know where to look for information on repair parts and material you will use

2-14. What should you do when materials and repair parts are not specified in the instructions accompanying a job?

1. Always use your own judgment
2. Never use your own judgment
3. Look for the information
4. Refuse the job until you are provided with the information

2-15. Which of the following sources of information is helpful in identifying or selecting materials and repair parts?

1. Stock cards maintained by the supply officer
2. Ship's plans and blueprints
3. Coordinated Shipboard Allowance List
4. All of the above

2-16. Which of the following sources of information should you consult to obtain the National Stock Numbers of repair parts for a diesel engine cylinder liner and gaskets?

1. Planned Maintenance System Manual
2. Coordinated Shipboard Allowance List
3. Nameplate on the equipment
4. Each of the above

2-17. What document should you use to request a repair item stocked in the supply department aboard ship?

1. DD Form 1150
2. DD Form 1348
3. NAVSUP Form 1250
4. NAVSUP Form 4757

2-18. Which of the following sources of information is/are NOT likely to identify the type of material used in manufacturing a gear for a fuel oil service pump?

1. Nameplate on the pump
2. Stock cards maintained by the supply officer
3. Ship's plans and blueprints
4. Coordinated Shipboard Allowance List

● Questions 2-19 and 2-20 are to be judge True or False.

2-19. When unable to locate the National Stock Number of an item you are requesting from a shipboard supply department, you should furnish the supply personnel with enough standard information to help identify the item.

2-20. SECAS is the designated system responsible for maintaining the CASREP status of your ship.

2-21. Who is responsible for ensuring that the proper documentation is completed and processed as described in Volume II of OPNAVINST 4790.41

1. The commanding officer
2. The engineer officer
3. The work center supervisor
4. The ship's 3-M coordinator

2-22. At the individual equipment level, which of the following forms is used to report a configuration change?

1. OPNAV Form 1250
2. OPNAV Form 1348
3. OPNAV Form 4790/2K
4. OPNAV Form 4790/CK

2-23. A work request to repair a pump shaft has been designated as a ship-to-ship job. Which of the following actions will the ship's force personnel be expected to perform?

1. Disassemble the pump and remove the shaft
2. Deliver the shaft to the repair shop
3. Pick up the shaft when the repair work has been completed
4. All of the above

2-24. All tests required to be performed by Quality Assurance must be witnessed by the

1. commanding officer
2. ship's force
3. type commander
4. SIMA repair officer

2-25. Under which of the following conditions would you use the OPNAV Form 4790/2K?

1. To request transferring a piece of equipment to another work center
2. To request PMS Maintenance Requirement Cards
3. To request a shipyard's assistance
4. To request consumable materials

2-26. What is the purpose of the OPNAV Form 4790/2L?

1. To defer a piece of equipment
2. To document completion of a job order
3. To request work from an IMA
4. To amplify information described on a 4790/2K

2-27. Which of the following forms is an automated work request produced by an IMA with computer capabilities?

1. OPNAV Form 4790/2K
2. OPNAV Form 4790/2L
3. OPNAV Form 4790/2Q
4. OPNAV Form 1348

2-28. Checking on the availability of materials before starting work on a maintenance job is an important part of careful planning because failure to do so may result in which of the following conditions?

1. Wasted effort
2. Unsafe working condition
3. Useless equipment
4. All of the above

2-29. The amount of information required to be given to the personnel doing a particular repair job will depend largely on which of the following considerations?

1. The safety precautions you expect them to ignore
2. The manhours estimated to complete the job
3. The experience of the personnel assigned to the job
4. The degree of care with which you expect to inspect the job upon completion

● Question 2-30 is to be judged True or False.

2-30. A careful inspection should be conducted after a job has been completed to ensure that the work was properly performed and that necessary records or reports have been prepared.

2-31. When estimating the amount of time required to accomplish a repair, what factor(s) should you take into consideration?

1. The personnel who can best do the job
2. The number of personnel required for the work
3. The availability of the repair materials
4. Each of the above

● Questions 2-32 and 2-33 are to be judged True or False.

2-32. The accuracy of job estimates that you must submit to your division officer is important because such estimates may affect the operational schedule of the ship.

2-33. When more than one shop is required to complete an engine repair, each shop should make a separate time estimate of the job.

2-34. Besides the actual time required for the work itself, what other factors must be considered in arriving at a final estimate for a particular job?

1. Drills
2. Inspections
3. Working parties
4. All of the above

● Question 2-35 is to be judged True or False.

2-35. Dividing a total job into sub-jobs and then determining the time and number of personnel required for each sub-job is a waste of labor and time for the purpose of arriving at accurate estimates.

2-36. Which of the following estimates is often the most difficult for a supervisor to make in arriving at a job completion time?

1. Tools required
2. Materials required
3. Personnel required
4. Time and labor required

2-37. You are responsible for submitting an estimate of the materials required to complete a job. If the job is one your shop handles regularly, which factor is a basis for making an accurate estimate?

1. Records of the jobs kept by the shop
2. In-service conditions to be fulfilled
3. Condition of tools and equipment
4. Availability of the materials

● Question 2-38 is to be judged True or False.

2-38. In estimating material needs for a job, you should make allowances for waste.

Learning Objective: Indicate practices and procedures used when training personnel.

2-39. In addition to the technical competence that you must possess before you can teach others, which of the following functions should you also be capable to perform?

1. Organize information
2. Present information effectively
3. Motivate your students
4. All of the above

● Question 2-40 is to be judged True or False.

2-40. From a training standpoint, each person on watch in the engineroom is required to function as part of a team because of the close relationship between each watchstander's duties.

2-41. Which of the following factors helps determine the procedures for training a new person in engineroom operations?

1. Ship's operating schedule
2. Number of experienced men available
3. Condition of engineroom machinery
4. Each of the above

2-42. An Engineman striker who is newly assigned to the engineroom is not ready for messenger duty training until he becomes familiar with the

1. duties of the throttleman
2. technique of reading pressure gages
3. procedures of starting or securing the main propulsion plant
4. locations of all machinery, equipment, piping, and valves

2-43. During what part of an engineroom watchstander's training should a student learn how to take gage readings?

1. While learning the duties of the throttleman
2. While learning the duties of the messenger
3. After becoming proficient in the duties of the throttleman
4. After learning to perform the duties of the throttleman

2-44. When should an Engineman striker be trained to perform the duties of a throttleman?

1. After becoming competent in administrative requirements
2. After becoming proficient in the duties of the messenger
3. While learning the duties of the messenger
4. While learning specific basic safety precautions

● Questions 2-45 and 2-46 are to be judged True or False.

2-45. A good way to start on-the-job training for the throttleman's job is to assign an experienced throttleman to supervise the trainee.

2-46. As the instructor of engineroom personnel, you should analyze and apply your own experiences and reactions to help trainees learn more effectively.

2-47. Which of the following factors should be included in the training of engineroom personnel?

1. Consideration of the individual difference in the learning rates of personnel
2. Time to be spent on engine theory prior to manual operation
3. Encouragement of personnel to notice and discuss differences in the ways that engines behave during operation
4. Each of the above

● Question 2-48 is to be judged True or False.

2-48. An experienced Engineman reporting aboard for duty from another type of ship will require a certain amount of retraining to qualify as a watchstander.

2-49. Which of the following factors should be emphasized constantly throughout an engineroom training program?

1. Safety precautions
2. Trial-and-error techniques
3. Emergency repair procedures
4. Machinery characteristics

● Questions 2-50 through 2-53 are to be judged True or False.

2-50. The PQS program is a method designed to ensure quality assurance.

2-51. Most PQS standards are divided into four sections.

2-52. The watchstation section defines the actual duties, assignments, and responsibilities needed for qualification.

2-53. As a work center supervisor, it is NOT absolutely necessary for you to be PQS qualified in all the equipment under your control.

2-54. When personnel are assigned to repair V, where should the emphasis be placed?

1. PQS, qualification in damage control
2. PQS, qualification in engineroom takeover
3. PQS, qualification in ship's 3-M system
4. PQS, qualification in first aid

2-55. As a repair party leader, you are responsible for which of the following functions?

1. Knowing how many personnel on the ship are fully qualified in damage control
2. Training your repair party personnel on the equipment they will be using
3. Training your repair party personnel in the function of a repair party
4. Both 2 and 3 above

2-56. What two Status Boards is Repair V required to maintain?

1. Stability and liquid load
2. Auxiliary and main propulsion machinery
3. Air and surface contacts
4. Personnel casualty and radiological

Learning Objective: Recognize the purpose and the importance of the Engineering Operational Sequencing System (EOSS).

● Question 2-57 is to be judged True or False.

2-57. The EOSS was developed to help combat the problems created by rapid turnover of personnel and the lack of needed information.

2-58. When the EOSS is used properly it accomplishes which of the following considerations?

1. Reduces operational casualties
2. Provides better plant control
3. Extends the operational life of machinery
4. All of the above

2-59. Under Stage I of the EOP, who has direct control of an evolution involving the starting and securing of a main engine?

1. The engineering officer of the watch
2. The engineroom top watch
3. The main propulsion asistant
4. The engineer officer

2-60. How does the EOP documentation help the EOOW?

1. It helps him to select equipment combinations for plant efficiency
2. It helps him to train newly assigned personnel
3. It helps him to properly schedule operational events
4. It helps him to perform all of the above tasks

2-61. To help assist the plant supervision with an operation involving the shifting of the ship's service generator, the EOP section of the EOSS provides him with which of the following documents?

1. Plant procedure charts
2. A diagram for plant steaming conditions
3. Plant status boards
4. All of the above

● Question 2-62 is to be judged True or False.

2-62. Stage II of the EOP can be used by the space supervisor to assist in the training of newly assigned personnel in the operation of equipment.

2-63. All engineroom watchstanders can increase their ability to control and prevent casualties by studying which of the following publications?

1. The user's guide
2. The EOCC manual
3. The EOP manual Stage I
4. The EOP manual Stage II

2-64. Which of the following elements must be included in a well administered and effective casualty control training program?

1. Recognition of the symptoms
2. Probable causes and effects
3. Preventive action necessary to reduce, eliminate, or control casualties
4. Each of the above